



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,168	10/30/2001	Tomio Echigo	954-010444-U	7706

2512 7590 09/25/2003

PERMAN & GREEN  
425 POST ROAD  
FAIRFIELD, CT 06824

EXAMINER

FOULADI SEMNANI, FARANAK

ART UNIT	PAPER NUMBER
----------	--------------

2672

DATE MAILED: 09/25/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

**Office Action Summary**

Application No.

09/890,168

Applicant(s)

ECHIGO ET AL.

Examiner

Faranak Fouladi

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is responsive to communications: application, filed on 10/30/2001.
2. Claims 1-9 are pending in the case, with claims 1-9 being independent.
3. The present title of the application is "METHOD AND DEVICE FOR DESCRIBING VIDEO CONTENTS" (as originally filed).

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "112", "113", "114", "121", "122", "213", "215", "216", "217", "218", "219", "223", "226", "227", "228", "229", "235", "236", "237", "238", "239", "246", "247", "248", "249", "259", "310", "330", "402", "411", "421", "440", "462", "464", "472" and "550".

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Double Patenting***

5. Applicant is advised that should claim 5 be found allowable, claim 6 and 7 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer- readable medium does not make the invention eligible for patenting MPEP section 2106 II A. The claimed invention as a whole must produce a “useful, concrete and tangible” result to have a practical application.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Dimitrova et al. [**Rx for semantic video database retrieval, Proceedings of the second ACM international conference on Multimedia, Pages: 219 - 226, Year of publication 1994**].
8. Regarding independent claim 1, “a description means for contents of motion picture, said means comprising of:
  - (a) means for setting reference plane;
  - (b) means for describing each object on said motion picture by positioning on said reference plane and predefined type of actions; and
  - (c) means for describing each scene by using said means for describing each object.” Dimitrova disclose means for setting reference plane in sec. 3.1 page 220 – page 221. Dimitrova also disclose describing each object by positioning on said reference plane and predefined type of actions in first paragraph of sec. 3.2 page 222; and further he disclose means for describing each scene by using said means for describing each object in third paragraph of sec. 3.3 page 223.

9. Regarding independent claim 2, " a search means for contents of motion picture, said means comprising of:

(a) means for setting reference plane;

(b) means for describing each object on said motion picture by positioning on said reference plane and predefined type of actions; and

(c) means for describing each scene by using said means for describing each object; and

(d) means for searching motion picture by using said means for describing each object or said means for describing each scene." Parts (a), (b) and (c) are similar to claim 1 and therefore are rejected under the same rationale. Regarding part (d), Dimitrova disclose in first paragraph of sec. 3.3 page 223.

10. Regarding independent claim 3, "a description method for motion picture, said method comprising the steps of:

(a) determining reference plane which represents information of object positions included in said motion picture;

(b) representing changes over time of each object on said reference plane as a trajectory;

(c) setting a description unit based on predefined type of actions of each object by using changes in shape of each object so as to assign actions of each object as each behavioral section; and

(d) defining each scene by plural objects." Dimitrova disclose means for setting reference plane in sec. 3.1 page 220 – page 221, and Dimitrova also discloses parts (b), (c), and (d) in sec. 3.3 (the whole section) page 223.

11. Regarding independent claim 4, "a search method for motion picture, said method comprising the steps of:

(a) setting reference plane which represents information of object positions included in said motion picture;

(b) representing changes over time of each object on said reference plane as a trajectory;

(c) setting a description unit based on predefined type of actions of each object by using changes in shape of each object so as to assign actions of each object as each behavioral section; and

(d) defining each scene by plural objects; and

(e) searching a specific scene by using said actions of each object or said scene." Parts (a), (b), (c) and (d) are similar to claim 3 and therefore are rejected under the same rationale. Regarding part (e), Dimitrova disclose in 2<sup>nd</sup> col. Lines 20-23 of sec. 4 page 224.

12. Regarding independent claim 5, "a description method for motion picture, said method comprising the steps of:

(a) determining reference plane from said motion picture;

(b) cutting a region map, an object trajectory ID, an action ID and a camera parameter from said motion picture;

(c) creating description of actions by each object from said region map, said object trajectory ID, said action ID and said camera parameter; and  
(d) creating description of scenes by using said description of actions by each object. Dimitrova disclose part (a) in sec. 3.1 page 220 – page 221 and disclose part (b), (c) , and (d) in 1<sup>st</sup> col. of sec. 4 page 224 – line 24 of 2<sup>nd</sup> col. page 224 (same page).

13.Regarding independent claim 6, “a description method for motion picture, said method comprising the steps of:

(a) determining reference plane from said motion picture;  
(b) cutting a region map, an object trajectory ID, an action ID and a camera parameter from said motion picture;  
(c) creating description of actions by each object from said region map, said object trajectory ID, said action ID and said camera parameter; and  
(d) creating description of scenes by using said description of actions by each object.” Dimitrova disclose part (a) in sec. 3.1 page 220 – page 221 and disclose part (b), (c) , and (d) in 1<sup>st</sup> col. of sec. 4 page 224 – line 24 of 2<sup>nd</sup> col. page 224 (same page).

14.Regarding independent claim 7, “a description method for motion picture, said method comprising the steps of:

(a) cutting a region map, an object trajectory ID, an action ID and a camera parameter from said motion picture;



(b) creating description of actions by each object from said region map, said object trajectory ID, said action ID and said camera parameter; and  
(c) creating description of scenes by using said description of actions by each object." Dimitrova disclose part (a), (b) , and (c) in 1<sup>st</sup> col. of sec. 4 page 224 – line 24 of 2<sup>nd</sup> col. page 224 (same page).

15. Claim 9 recite a computer readable storage medium which has recorded program containing executable instructions executing the method of claim 3. It is inherent to have a medium configured to store or transport computer readable code in a computer system. For example compact disc has been included and used in the computer systems since 1990s or magnetic data storage devices have been used since 1980s. Also Dimitrova discloses a software application in sec. 5 lines 38-46 page 226.

### ***Conclusion***

16. Any this communication or earlier communications from the examiner should inquiry concerning be directed to **Faranak Fouladi** whose telephone number is **703-305-3223**. The examiner can normally be reached on Mon-Fri from 8:00-4:30.
17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Razavi** can be reach at **703-305-4713**.
18. **Any response to this action should be mailed to:**  
  
Commissioner of Patents and Trademarks  
  
Washington, DC. 20231

**Or faxed to: 703-872-9314 (for Technology Center 2600 only)**

19. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, sixth-floor (Receptionist).

20. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-872-9306.

**Faranak Fouladi-Semnani**  
**Patent Examiner**  
**Art Unit 2672**

A handwritten signature in black ink, appearing to read 'M. Razavi', with a long horizontal stroke extending to the right.

**MICHAEL RAZAVI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**